

ABSTRACT OF THE DISCLOSURE

A reactor containment vessel of a boiling water reactor configured to contain a reactor pressure vessel. The reactor pressure vessel is connected to at least one main steam pipe which penetrates the reactor containment vessel at a main-steam-line penetration point. The main-steam-line penetration point is disposed on a first side of the reactor containment vessel. Distance between outer surface of the reactor pressure vessel and inner surface of the reactor containment vessel on the first side is longer than the distance on a second side which is opposite to the first side.